

ABSTRACT

A transmitter capable of providing a wide output control variable width with high efficiency is provided.

5 Saturation mode operation is performed in the vicinity of the maximum transmission power and the input level of a large power amplifier 12 is enlarged and is fixed, whereby while the large power amplifier 12 is operated in a saturation state, the amplitude component of a modulation signal is input to an
10 R input terminal 33 in the range responsive to an output power control level and power supply voltage VDD of a power supply terminal 25 is amplitude-modulated, whereby highly efficient polar coordinate modulation is performed. In smaller transmission power, linear mode operation is performed, the
15 input level of the large power amplifier 12 is lessened for operating the large power amplifier 12 in the linear mode, and the power supply voltage VDD of the power supply terminal 25 is made variable in response to the output power control level, whereby transmission power control is performed.

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